Executed & Publish'd, by E. O Donovan, as the Act directs, 8th Decr. 1789.

THE

BOTANICAL REVIEW,

OR THE

BEAUTIES OF FLORA:

ALETRIS CAPENSIS, WAVED-LEAVED ALETRIS, or BASTARD ALOE.

Claſs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Corol. infundibuliformis. Stamina, inſerta laciniarum baſi. Cap. 3-locularis.

Specific Character.

ALETRIS *capenſis* Acaulis, foliis lanceolatis undulatis, Spica ovata, floribus mutantibus. *Sp. Pl. p.* 456.

Explanation of the FIGURES.

A. A Flower laid open, (half the natural ſize) 1, 1, the ſix Stamens; 2, the Style; 3, the Germen.

B. The three cells of the Germen, or Seed Veſſel.

C. The conſtruction of the Fertilizing Duſt or Farina, deeply magnified by a microſcope.

B The

ARNOLD ARBORETUM HARVARD UNIVERSITY

The Stamens are the male, the Piſtil and Germen the female organs of Plants, without which perfect or at leaſt fruitful Seeds could not be produced; a faithful inveſtigation of thoſe parts cannot therefore but be acceptable to the curious in Botany.

The male organs conſiſt of two parts; the filament, which is a fine thread-like ſubſtance, ſupports on its ſummit a ſmall veſſel, called the Anthera, divided into ſeveral cells, in which the Farina is prepared: the Farina is ſo ſmall that the minuteſt inſpector, with the naked eye, cannot even diſtinguiſh between a ſingle atom or a cluſter of twenty. When perfect, it is diffuſed over the Stigma or ſummit of the Style, and thence proceeds the generation of perfect ſeeds.*

N. B. In this Plant it is of a yellow colour.

The Draught of the *Aletris capenſis*, owing to the natural ſize of the Plant, is drawn on a ſcale of one-third, as it would have anſwered little purpoſe, in ſuch a ſmall ſcope, to have figured any part as large as the real object.

This Specie, whoſe beautiful delicacy and majeſtic elegance muſt in many points ſtand unrivalled, is a native of the Cape; was introduced into this country by Mr. W. Malcolm, in 1768: has a bulb root, and is in flower late in the ſeaſon.

As it produces many young bulbs at its roots, they are cut off; which being ſet into good loam, with the aſſiſtance of real or artificial heat, never fail to proſper: during winter, it requires a moderate heat in the ſtove.

* This, and every other part which concern the fructification, may be found amply illuſtrated in our Eſſay.

Executed & Publish'd, by E.O.Donovan, as the Act directs, 8th Decr. 1789.

ILLICIUM FLORIDANUM. RED FLOWER ANISEED TREE.

Claſs and Order:

Polyandria Polygynia.

Generic Character.

Cal. 6-phyllus. Petala 27. *Capſ.* plures, in orbem digeſtæ, bivalves, monoſpermæ.

Specific Character.

ILLICIUM *Floridanum*, floribus rubris.

Explanation of the FIGURES.

A. The Capſules, Petals, *&c.*
B. The Capſules taken from the Stamens.
C. The order of the Stamens.
D. The ſide view of a Stamen.
E. The under ſide of the ſame.
F. The form of the Farina when magnified: to the naked eye this is a white duſt.
G. A Stigma: to the naked eye they appear covered with Farina, when magnified. See the Figure.

This, not long ſince ſcarce and valuable Plant, is, from the multiplicity of off-ſets which it produces, at length become ſo plentiful as to have many poſſeſſors, it will, however, require ſome extent of time, before the whole of the curious can be gratified with this additional ornament to their collection.

We underſtand this Plant came into our country in 1766, and that we are indebted to John Ellis, Eſq. for its introduction. Being a native of Florida, it requires the heat of a ſtove:

ſtove: they are uſually cultivated by cuttings; *i. e.* the branches are cut off at the joint, which, being put into good bog loam, with a proper degree of heat, is moſtly productive of a healthy Plant.

It flowers about April. The flowers ſhortly drop off, and as ſhortly are ſucceeded by others, till about July or Auguſt; it ſometimes raiſes itſelf, in elevation, ſeveral feet; at this period, its many branches, number of bloſſoms, and plenitude of young foliage, exhibit a ſpectacle which, for elegance, is ſcarce conceivable.

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Published by E. O. Donovan as the Act directs Jan.y 1st. 1790.

GEUM MONTANUM, MOUNTAIN AVENS, or HERB-BENNET.

Claſs and Order.

ICOSANDRIA POLYGYNIA.

Generic Character.

Cal. 10-fidus: laciniæ alternæ minores. *Petala* 5, Sem. ariſtata.

Specific Character.

GEUM. *Montanum*, caule unifloro, ariſtis rectis villoſis, foliis pinnatis piloſis: foliolo extimo maximo ſubrotundo; inferioribus ſenſim minoribus. *Hortus Kewenſis.*

GEUM. *Montanum*, flore inclinato ſolitario, fructu oblongo: ariſtis plumoſis rectis. *Sp. Pl. p.* 717.

CARYOPHYLLATA-pinnis confertioribus extrema ſubrotunda, tubis rectis. *Hall. helv.* 336.

CARYOPHYLLATA-alpina lutea. *Bauh. pin.* 322.

CARYOPHYLLATA-alpina. *Pon. bald.* 342.

CARYOPHYLLATA-montana. *Cam. epit.* 727.

CARYOPHYLLATA-alpina minor. *Bauh. pin.* 322. *prodr.* 139.

CARYOPHYLLATA-alpina minima, flore aureo. *Barr. rar.* 588. *t.* 399.

Explanation of the FIGURES.

A. The Stamens, *&c.* ſeen by tearing off part of the Calyx.

B. The Stamens taken away to ſhew the Styles.

C. The Calyx.

E. The order of the Styles ſhewn by a ſection.

F. One

F. One of the Styles (*magnified*). *Though the Stigmata of those Styles to the naked eye appear obtuse, and indeed by authors have been described as such, they are in reality two-cleft—this is obvious to every examiner who views them with a microscope, particularly at the time of impregnation.* 1, the Stigma; 2, the Seed, yet immature.

G. A Stamen; the Anthera discharging the Pollen or Farina, which is of a yellow colour.

H. The form of the Farina, deeply magnified.

This Plant grows naturally on the Alps in Austria, and Switzerland, and its unusual hardiness recommends it to the attention of the Florist, as it for a considerable time braves the frost, and will grace the Garden at a time when but few others can sustain the severity of weather.

Mr. P. Miller advises sowing the Seeds in Autumn, from which young Plants may be expected the ensuing Spring; but if sown in the Spring it rarely comes to perfection. It will thrive in almost any soil, and requires a shady situation.

It flowers in May, and is not unfrequently met with (in the same state) till December or January.

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Executed & Published by E. D. Donovan as the Act directs Jan.y 1st 1790

ASTER GRANDIFLORUS, SUPERB FLOWER, STARWORT.

Clafs and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept, nudum. *Pappus*, fimplex. *Cor.* radii plures 10. *Cal.* inbricati fquamæ inferiores patulæ.

Specific Character.

ASTER-*Grandiflorus*, foliis linearibus integerrimis fubamplexicaulibus hifpidis ciliatis; ramorum calycifque reflexis. *Hortus Kewenfis.*
ASTER-*Grandiflorus.* *Sp. Pl. p,* 1231.

Explanation of the FIGURES.

A. An hermaphrodite Floret.

B. The fame, laid open, which fhews its five Stamens and one Style, the Stigma of which is two-cleft.

C. The Style and Stamens magnified.—Fig. 1, the rough outfide of the Stigma; 2, the infide, which appears fmooth: down the Style runs two tubes, which, when magnified, being tranfparent, is very plain.—Fig. 3, fhews an Anthera before it is opened; 4, the front, when difcharging the Farina; 5, the back view of the fame.—Thefe Antheras confift only of one cell, which, when unfolded, fhews the Farina adhering to the fides within.---The five Antheras are connected, and form a tube which furround the Style.

D. The form of the Farina: though this is yellow, as well as the Farina of the *Geum Montanum*, when magnified they bear not the leaft refemblance to each other.

This

This Specie of ASTER, trivially known by the name of Catesby's Starwort, is a native of America; has long been innured to our climate, flouriſhes in the open grounds, and is in flower from Auguſt ſometimes till Chriſtmas.

Miller, ſpeaking of the mode of culture requiſite, ſays— "It doth not multiply faſt by its roots; but may be propa- "gated in plenty by cuttings made from the young ſhoots "in May, which, if planted in a bed of light earth, and "ſhaded from the ſun, will take root."

Executed & Published by E. Donovan, as the Act directs, February 1st. 1790.

LIMODORUM TANKERVILLIÆ, CHINESE LIMODORUM.

Class and Order.

GYNANDRIA DIANDRIA.*

Generic Character.

Nectarium monophyllum, concavum, pedicellatum, intra petalum infimum.

Specific Character.

LIMODORUM *Tankervilliæ.* Floribus racemosis imberbibus. *Hortus Kewensis, Pl.* 3, *P.* 302, *Vol.* III.

THIS beautiful exotic, entitled the *Limodorum Tankervilliæ*, grows naturally in and near the country of China:---We learn, about the year 1778, *John Fothergill*, M. D. introduced it into this kingdom; from which time to the present it has been chiefly confined to the stove of the curious---where, in order to nourish and render it healthy, they set it in a composition of bog and loam in the most commodious place for light, heat, &c. the hot-house affords. In this situation we have seen them three or four feet in height.

The Author of the *Hortus Kewensis* mentions March and April as the time of its flowering---this must be in its native climate; in this country it is precarious, flowering at any time and season of the year.

It is propagated by young bulbs taken from the root.

It is at present the unanimous opinion of Botanists that this Plant hath only *two Stamina*---the ingenuous Author of the *Hortus Kewensis* has particularly signified the same: we are aware of the arduous task of withstanding such a *popular opinion*, and equally so of the folly attendant even on the idea of consigning to oblivion that which, upon investigation, might prove the Order a *popular error*---with all possible care

 and

and attention, and with every power of a microſcope, we have examined the parts of *fructification*; we find not *two* but *eight diſtinct Stamina*, and how, to the ſcandal of every branch of the ſcience, ſuch an opinion could be formed, is difficult to determine.---We cannot too ſtrongly recommend to every Profeſſor of Botany an impartial examination of points whereon their eſtimation dependeth, and this error, not improperly, may be laid to their charge.

Reſult of our microſcopic obſervations, for general information.---Each Flower hath two ſets of *Stamina*---two ſhort and two longer *Stamina* conſtitute each ſet;---the baſe of the four *Filaments* are encloſed within a very fine membrane, by which each ſet is connected to the inſide of its reſpective cell;---the *Filaments*, at firſt ſight, are ſcarcely diſtinguiſhable, being formed of a jointed ſubſtance, contracted in a very ſmall compaſs, but ſo exquiſitely elaſtic that it may be drawn out to ten times the length it at firſt appeared of; and in this ſituation we may perceive the juſt proportion of the *Filaments*---the *Antheræ* are eight alſo: each are divided (by a ſubſtance reſembling the *Cotyledons* of a Seed) into three cells, wherein the *Farina* is prepared.

In order to prove what is here advanced, lay, on the object glaſs of a microſcope, one of the ſuppoſed *Stamina*; hold under the finger nail one of the *Antheræ*, and with a blunt point laid carefully on either of the three others, the *Filaments* may be drawn out to the length above-mentioned, but, on being let looſe, will ſpring back to its firſt form. The *Stigma* being immediately under the *Stamina*, no exertion of nature is required to extend the *Filaments*; it is plain, the male, if at a greater diſtance, would reach the female organs.

Explana-

Explanation of the FIGURES.

A. The Plant, drawn on a ſcale.

B. The parts of *fructification*.

C. The *Stamina*.

D. The *Stigma*, magnified; *ſhort points cover the ſame.**

E. One of the ſets of *Stamina*, as it appears under a microſcope. Fig. 1, the contracted elaſtic *Filaments*.

F. The ſame when the *Filaments* are extended.---This figure, in its preſent appearance, cannot ſurely be conſidered as one *Stamina*.

G. A tranſverſe ſection of an *Antheræ*, ſhewing the three cells.

H. Conſtruction of the *Farina*; thoſe are rarely found diſtinctly formed, owing probably to climate.

* *Vide* our Eſſay.

ERICA

ERICA CILIARIS, CILIATED HEATH.

Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-phyllus. *Cor.* 4-fida. Filamenta receptaculo inserta, Antheræ bifida. *Caps.* 4-locularis.

Specific Character.

ERICA *Ciliaris*, Antheris muticis inclusis, corollis ovatis grossis, Stylo exserto, foliis ternis, racemosis secundis. *Syst. Veget. p.* 368.

Explanation of the FIGURES.

A. The parts of *fructification.*
B. Form of the *Farina*, magnified.*
C. A leaf magnified. *The leaves are surrounded with fine hairs.*

About the year 1773 this curious Specie of Heath was brought into this country.---It is a native of Spain and Portugal, rarely if ever known to produce Seeds in this climate, but so hardy that during winter it requires only a green-house shelter.

Is propagated, like most foreigners of the same Genus, by cuttings, and is in flower from July to September.

* *Vide* Essay on the minute Parts of Plants.

Executed & Published by E. O.Donovan, as the Act directs, Feb.y 1.st 1790.

Executed & Published by E. O Donovan, as the Act directs, 1st March 1790.

CANNA INDICA, INDIAN FLOWERING REED, or CANE.

Class and Order.

MONANDRIA MONOGYNIA.

Generic Character.

Corollæ 6 partita, erecta: labio bipartito, revoluto, *Stylus* lanceolatus, corollæ adnatus, *Calyx* 3-phyllus.

Specific Character.

CANNA *Indica*, foliis ovatis utrinque acuminatis nervosis, *Sp. Pl.* 1.

Explanation of the FIGURES.

A. B. The lance-ſhaped Style and Stamen.
C. Conſtruction of the Farina, *deeply magnified.*

The Indian flowering Cane grows naturally in the warmer parts of America, *&c.* From the appearance of the Seeds, which are round, hard, black and ſhining, it is called by the inhabitants of the Britiſh iſlands in the Indies, Indian ſhot. Though it has been long cultivated in this country, its delicate conſtitution is by no means inured to the ſeverity of winter, or even a green-houſe ſituation.

Mr. P. Miller, in the Gard. Dict. writes to this intent---"All the ſorts (of *Canna*) are propagated by Seeds, which ſhould be ſown on a hot-bed in ſpring, and when the Plants are fit to be removed, they ſhould be tranſplanted into ſeparate ſmall pots and plunged into a moderate hot-bed of tanners bark, obſerving to ſhade them till they have taken root, after which a larger ſhare of free air ſhould be admitted to them every day in warm weather."---They muſt be afterwards

 ſhifted

ſhiftedi nto larger pots, and part of them put into the hot-bed again---the others placed abroad in June in a warm ſituation. Thoſe in the hot-bed will be ſtrong enough to flower well the winter following, but thoſe in open air will not till the next ſummer; they may remain therefore till the beginning of October, be then put into the ſtove and treated as other hot-houſe Plants.

Executed & Published by E. O'Donovan, as the Act directs, March 1st 1790.

CISTUS HELIANTHEMUM, DWARF CISTUS or ROCK ROSE.

Claſs and Order:

Polyandria Monogynia.

Generic Character.

Cor. 5-petala, *Cal.* 5-phyllus, foliolis duobus minoribus.

Specific Character,

CISTUS *Helianthemum*, ſuffruticoſus procumbens, ſtipulis lanceolatis, foliis oblongis revolutis ſubpiloſis, *Flo. Lon.*

Explanation of the FIGURES.

A. The Stamina.
B. The Piſtil and Stamina.
C. One of the Stamina, *magnified.*
D. The Seed Veſſel.
E. The ſame, as it *(when ripe)* naturally divides to diſcharge the Seeds.
F. Form of the particles of Farina.

A native of the ſouth of France, Spain and Portugal, and of ſome parts of England. There are three Varieties of this Specie, one bearing a pale red, the ſecond a white, and the third a yellow Flower. They are all hardy Plants, and may be propagated by Cuttings or by Seeds---though Seeds, as of moſt Plants, are by far the moſt ſucceſsful. It moſt uſually delights in a dry ſoil, or in ſpringing up amongſt rocky fragments; its figure, though not luxuriantly beautiful, is pleaſant and neat, and deſervedly is cultivated in many gardens.

The Flowers are of ſhort duration, but are immediately ſucceeded by others, ſo that, if a favourable ſeaſon, they may be met with from June till the latter end of October or beginning of November.

CYCLAMEN PERSICUM, PERSIAN CYCLAMEN.

Claſs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corolla rotata, reflexa, tubo breviſſimo: fauce prominente. *Bacca* tecta capſula.

Specific Character.

CYCLAMEN *Perſicum*, foliis cordatis ſerratis. *Miller's Dict. 4to. ed. p. 6.*

Explanation of the FIGURES.

A. The Piſtil, magnified.

B. The Farina, magnified.---*Note*, they are very ſmall in proportion to thoſe of the Ciſtus.

The Figure is half the natural ſize.

This Cyclamen is of late introduction, and being a native of the eaſtern climes, require a green and not unfrequently a hot-houſe ſhelter.---They are ſometimes propagated by young bulbs, but thoſe being in general of little account, they are moſtly raiſed from Seeds, which ſhould, ſoon after ripe, be put into pots of light undunged earth, about half an inch deep, and thence into a mixture of lime rubbiſh, and loam, placed ſo as to receive the morning ſun, till the latter end of October, and then removed to a warmer ſituation.

They flower about December, and continue through the ſpring.

A
B

Pub.d as the Act directs by E. O. Donovan April 1st 179

STATICE SUFFRUTICOSA, NARROW-LEAVED SHRUBBY THRIFT.

Claſs and Order.

PENTANDRIA PENTAGYNIA.

Generic Character.

Cal. 1-phyllus, integer, plicatus, ſcarioſus. *Pet.* 5, *Sem.* 1, ſuperum.

Specific Character.

STATICE *Suffruticoſa*, caule fruticoſo: ſuperne nudo ramoſo, capitulis, ſeſſilibus, foliis lanceolatis viginantibus. *Sp. Pl.* 396.

On credible authority, this Species was introduced from Siberia in 1781, by Meſſrs. Lee and Kennedy.

It is a hardy Plant, will grow in the ſoil chiefly applied to foreigners, bog and loam, and may be propagated by cuttings, which ſhould enjoy an airy ſituation.

Flowers early in February, and continues the ſame throughout the warm ſeaſons, to the beginning of October.

Publish'd by E. Donovan as the Act directs April 1st 1790.

ERYTHRONIUM DENS CANIS, DOG's TOOTH VIOLET.

Claſs and Order;

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, campanulata; *Nectario* tuberculis 2, petalorum alternorum baſi adnatis.

6

Explanation of the FIGURE.

A. The Farina.

Linnæus makes two Species of the *Erythronium*, but Miller and others have thought the foundation too ſuperficial to complete a Specific diſtinction.

It is a native of Siberia, Italy, and Virginia; has been long cultivated in this country, thrives well in the open grounds, and in the month of March enriches the beauty of a pleaſure-garden in a delightful manner, eſpecially where ſet in patches, amongſt other Flowers of the ſpring.

There is one circumſtance which, though trifling, may be noticed; the *Antheræ* of three *Stamina* open before the Flower, after the *Farina* is ſhed: the other three, which are con-

confiderably longer, open alfo; fo that this Plant may be faid to receive a double impregnation.*

They are readily cultivated by young bulbs taken from the root and fet into beds of loam.

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* *Vide* our ESSAY.

E.D. Donovan as the A[illegible] May 1 1790.

STRELITZIA REGINÆ, CANNA-LEAVED STRELITZIA.

Claſs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Spathæ. Cal. o. *Cor.* 3-petala; *Nectar.* 2-phyllus, genitalia involvens; *Peric.* 3-loculare, polyſpermum.

A. The Plant, on a ſcale, B. the natural ſize.

Lately, a Friend of ours, in a voyage to China, touched at the Cape of Good Hope, and thence tranſmitted, among other drawings and remarks, a figure of the *Strelitzia Reginæ*, copied from the beſt ſpecimen he could procure. We have ſeen the Plant at the Royal Garden at Kew, the Phyſic Garden at Chelſea, and in the ſtoves of ſeveral private Gentlemen, whence, allowing for the imperfections of art and the method of cultivating it, we conceive is ſufficiently accurate to convey an idea of the original.

To the unwearied reſearches, expenſive undertakings, and laudable intentions of SIR JOSEPH BANKS, Bart. the friends of the ſcience ſtand indebted (among a numerous collection) for the Plant which is at preſent held in univerſal eſtimation, and whoſe extreme ſcarcity adds ſtrongly to the obligation.

It was introduced in 1773, but we do not underſtand it has yet produced Seeds ſufficiently perfect to furniſh healthy flowering Plants. The ſpecimen at Chelſea, by the ſwelling of the *Spatha*, &c. bears a favourable indication of the Seeds ripening.

Whilſt confined to Kew, Chelſea, and the ſtoves of individuals, the curious cannot gratify themſelves with a critical examination of its parts, it is therefore to be wiſhed for that Seeds will be produced which may render the Species more plentiful.

It flowers in April, May, and June. The *Petals* (which to each are three) are of an orange colour, in ſome inclining more to yellow than in others: the *Nectarium*, which is of a deepiſh blue, admits of equal variation, even in its native ſoil, and emits, at the time of flowering, a vaſt quantity of Nectar.

The Author of the *Hort. Kew.* thinks the *Nectarium* conſiſts of three wings or leaves, but, on near inſpection, the ſuppoſition proves erroneous; the ſuppoſed two wherein the *Stamina* and *Style* is encloſed being undivided.

In ſome, the undulation on one ſide of the leaves is not ſo conſiderable as in others; this difference prevailed even between the ſpecimens at Kew and Chelſea.

The Plant, if healthy, will grow three, four, or five feet high, and will bear from three to ten, or more, flowers on each *Spatha;* in the ſtove it requires a light and warm ſituation, and is propagated by Seeds, in white loam and a ſmall quantity of bog earth.

Explana-

Executed & Published as the Act directs by E. Donovan May 1st 1790

Explanation of the FIGURES *in* PLATE 13.

A. The *Nectarium.*

B. The ſame opened, to ſhew the five *Stamina* and *Style*;— the *Antheræ* are connected to the inſide of the *Nectarium*, to five thread-like ribs, which ſtrengthen the *Nect.* to bear the encloſed fructification erect: the *Style* is contained in the *Nect.* the *Stigma* only appearing above it.

C. The *Stigma* (*mag.*) It is naturally trifid, but being covered with a mucilaginous moiſture, is not diſcernible unleſs divided.

D. Two of the *Stamina*, (*mag.*) ſhewing the connection with the *Nect.*

E. The *Farina* (*deeply mag.*) the Particles are faſtened to each other by Fibres, &c.*

F. The under ſide of the leaves have a beautiful pearl-coloured appearance, which is taken off with a touch of the finger. It adds a great degree of delicacy to the original, and therefore worthy inveſtigation. The Figure here given ſhews it magnified: the pearl colour is formed of tufts of fine hairs, ranged in regular order over the whole ſurface of the leaf, but ſo exquiſitely delicate that the points are deſtroyed by a touch.

G. The ſame, magnified by a deeper power.

* An Account more at large in our Eſſay.

Executed & Published by E. Donovan as the Act directs June 1st 1790

ANTHOLYZA CUNONIA, SCARLET-FLOWER'D ANTHOLYZA.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

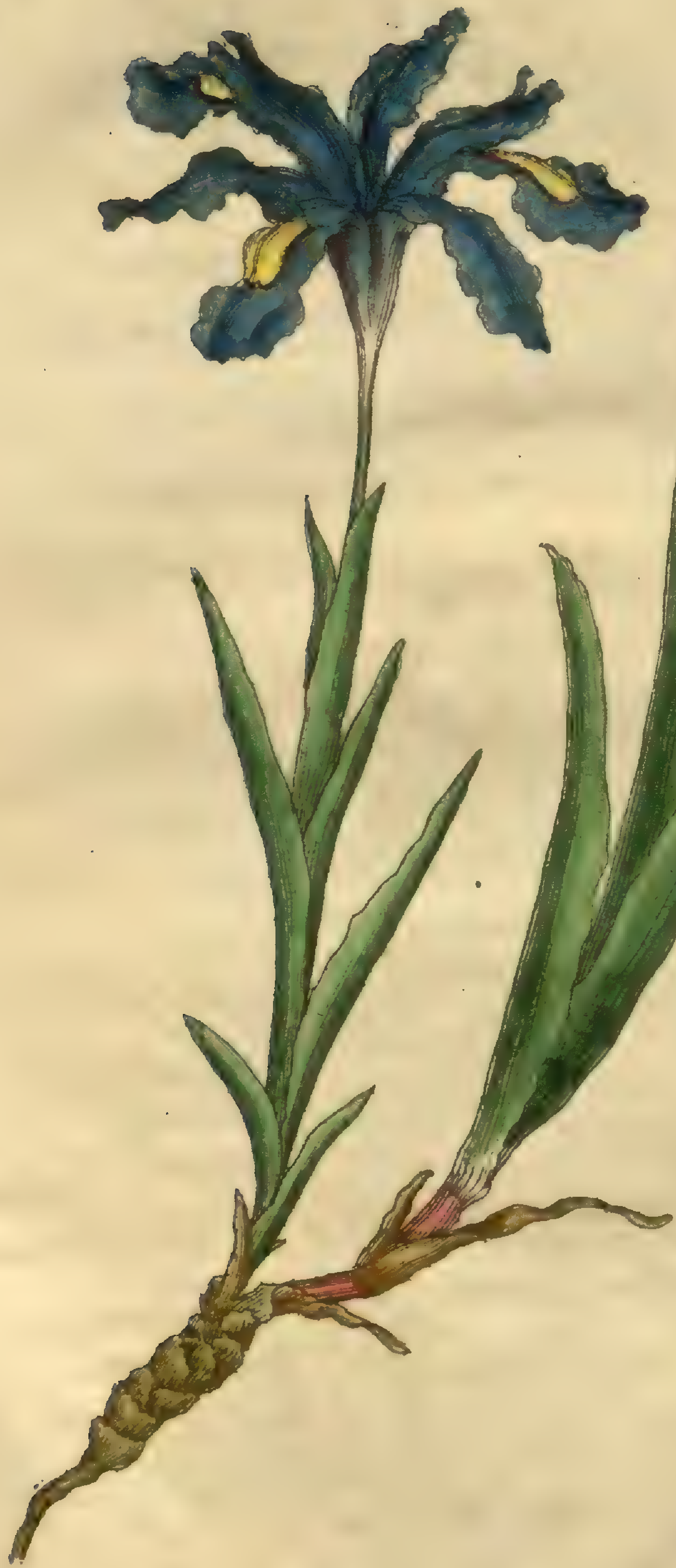
Cor. tubulofa, irregularis, recurvata, *Capf.* infera.

Specific Character.

ANTHOLYZA *Cunonia*, Corollis rectis: labii quinquepartiti lobis duobus extimis latioribus adfcendentibus. *Sp. Pl.* 54.

Is a native of the Cape of Good Hope, and though not to be confidered equally fcarce or beautiful as fome of its vegetable productions (the *Strelitzia Reginæ*) makes a very pretty appearance. Was it to flower in December or January, inftead of May and June, we fhould view it with partiality to its beauty; but difplaying its Flowers when "The face of Nature glitters in her glory," it is feen only among numbers equally attractive.

It is faid to have been cultivated by Mr. P. Miller in 1756. It is propagated by Seeds, or parting its roots, and fown or planted in pots of bog and loam earth. If raifed from feeds it will be no unneceffary precaution to plunge the pots in a bed of tanner's bark for a fhort time, and afterwards to remove them into the green houfe: it will require no warmer fituation, unlefs the weather is feverely cold; but may be fet out of the houfe in the fhade during the fineft of the fummer months.



Executed & Published by E. Donovan as the Act directs June 1st 1790

IRIS CRISTATA, CRESTED IRIS.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: *Petalis* alternis reflexis *Stigmata* petaliformia.

Specific Character.

IRIS *Criftata*; Corollis barbatis: barba criftata, caule fubunifloro longitudine foliorum, germinibus trigonis, petalis fubæqualibus. *Hort. Kew.*

Few of the many tribes of Plants afford a more beautiful or nobler appearance than that of the *Iris*; among them are two fpecies which in the afpect of their Flowers bear a near refemblance, the *Iris Perfica* and *Criftata*; the former, it muft be confeffed, has in its *Petals* a more variegated appearance, but the latter, on that account, labours under no difadvantage, fince a delicate and graceful foliage makes ample compenfation.

Grows naturally in North America; was introduced in 1756 by Peter Collinfon, Efq. encreafes by the multiplicity of its roots, and thrives well, treated as a green houfe Plant.

Flowers in May, and is ufually propagated by parting its roots.

Execut.d & Published by E. Donovan as the Act directs Aug.t 1.st 1790

Pl. 16. A.

VACCINIUM MACROCARPON, AMERICAN CRANBERRY.

Claſs and Order:

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. ſuperus, *Cor.* 1-petala; *Filamenta* receptaculo inſerta, *Bacca.* 4-locularis, polyſperma.

Specific Character.

VACCINIUM *Macrocarpon*, foliis integerrimis ovali-oblongis obtuſis planis, caulibus repentibus filiformibus. *Hort. Kewen.*

Flowers May, June, and July; and though its bloſſoms poſſeſs not a diſtinguiſhed luxuriancy of color, a portion of delicacy amply makes amends, and certainly entitles it to a place in the border.

It is not a plant which generally brings its fruit to perfection in this country; though it ſometimes does; when it fails, it may proceed from the ill health of the plant, from injudicious management, from ſoil, or from ſeaſon.

Is increaſed by ſeeds, or by layering, which, as it creeps on the Ground, is very eaſily managed.

The naturaliſt, among the profuſion of ſingularly conſtructed objects ſeen by the aſſiſtance of the microſcope, will find the ſtamens, &c. of this plant, no way unworthy his notice.

" Is a native of North America, and was cultivated in " 1763, by Mr. JAMES GORDON." *Hort. Kewen.*

Pl. 16. B.

SISYRINCHIUM BERMUDIANA, ſmall SISYRINCHIUM.

Claſs and Order.

GYNANDRIA TRIANDRIA.

Generic Character.

Monogyna. *Spatha* 2-phylla; *Pet.* 6, plana. Caps. 3-locularis.

Specific Character.

SISYRINCHIUM, *Bermudiana*, foliis enſiformibus enerviis. *Syſt. Vegt.* 820.

The introduction of this plant is aſcribed to Mr. JACOB BOBART, 1693, and though ſince that time it might be ſuppoſed to have increaſed conſiderably, it has not happened in a proportion to many plants; if raiſed from good ſeeds, it ſoon becomes vigorous enough to decorate the border, and will produce ripe ſeeds, by which it may be propagated.

Nor will the ſtamens and piſtil of this plant refuſe an attentive examiner, an inſtance of the fallibitity of a ſuperficial ſurvey, even of the greateſt naturaliſt.

Is a native of North America, &c.—Flowers May and June, and often April and July.

[illegible] by E. Donovan

Pl. 17. A.

DAPHNE CNEORUM, TRAILING DAPHNE.

Claſs and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 0. *Cor.* 4-fida, corollacea, marceſcens, Stamina includens; *Bacca* 1-ſperma.

Specific Character.

DAPHNE *Cneorum.* Floribus congeſtis terminalibus ſeſſilibus, foliis lanceolatis nudis mucronatis. *Syſt. Veget.* 371.

A native of Switzerland and of Auſtria; has been ſome years in this country, but is not, nor is at preſent, likely to be procured in profuſion, though enough may be had for the curious. Its beauty is attractive and its ſmell aromatic, and therefore entirely calculated for thoſe who wiſh to decorate their apartments with the productions of the vegetable creation.

Uſually grows two or more feet high, with its branches regularly ſpread, and beautifully decorated with flowers and foliage.—Flowers in April and September.

Pl. 17. B.

ERICA AUSTRALIS, SPANISH HEATH.

Claſs and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-phyllus, *Cor.* 4-fida, filamenta receptaculo inſerta, antheræ bifida, *Caps.* 4-locularis.

Specific Character.

ERICA *Auſtralis*, Antheris criſtatis, corollis cylindricis, ſtylo exſerto, foliis ternis patentibus. *Syſt. Vegt.* 366.

Thoſe who, in the cultivation of their garden, are not too ſtrictly attached to plants of ſhewy colours, need never object to any of this genus; few plants can boaſt of a more delicate appearance, or more harmony in the arrangement of their parts: contrary to moſt others, after the plant has flowered, the flowers do not drop off, but dry and change to a brown caſt; the piſtil and ſtamens remain as when in full flower, and the old leaves will remain ſo long on the branches as to be crumbled off by a touch.

" The Erica Auſtralis is a native of Spain and Portugal; " was introduced in 1769, by G. W. Earl of Coventry, " and flowers April and May." *Hort. Kewen.*

Executed & Published by E. Donovan, as the Act directs October 1st 1790.

FUCHSIA COCCINEA. Scarlet-flowered FUCHSIA,

Clafs and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 1-phyllus, coloratus, corollifer, maximus. *Petala.* 4, parva. *Bacca* infera, 4-locularis, polyfperma.

Specific Character.

FUSCHIA *Coccinea*, foliis oppofitis ovatis denticulatis, petalis abovatis obtufis. *Hort. Kewen.*

Of the numerous addition of new plants to our former ftore, none can be more delicately beautiful than this; nor is it likely, any, will in a fhort time become more plentiful, as it moft readily multiplies by feeds or by cuttings.—Though introduced fo lately as 1788, from the extenfive increafe made by its cuttings, it is now in the poffeffion of many curious perfons; and it is very far from improbability, that a fhort time hence, it will be fufficiently plentiful to fupply the wifhes of thofe who at prefent cannot be gratified with it.

It was introduced by Captain Firth, and is a native of Chili. *Hort. Kewen.*

It has been by fome confidered as a plant whofe delicate conftitution always required the heat of a ftove; but this, like many fimilar errors, time proves unneceffary; when it has once attained vigour and ftrength, the green houfe will be fufficiently warm, if the weather proves fine.

From May to July is ſignified for the time of its flowering; but cultivation, &c. has rendered it more hardy: many fine plants of it are at this period in full bloom, and from one of them this draught was taken.

The flowers vary in color from almoſt a ſcarlet, to a blood red.

DICTAMNUS.

Engraved & Published by E. Donovan as the Act directs October 1 1790

DICTAMNUS ALBUS, *flore Rubro*, Red-flowered FRAXINELLA.

Clafs and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5, patula. *Filamenta* punctis glandulofis adfperfa. *Caps.* 5, coalitæ.

DICTAMANUS *Albus, flore rubro* Jacqu, Auftr. 5. p. 13. t. 428.

In this fpecies two varieties occur, at leaft varieties only they are at prefent confidered, and are diftinguifhed by the red flowered and the white flowered Fraxinella; the fpecies is a natives of Germany, France, and Italy, and flowers from May to July.

The moft baneful poifons, and moft healing antidotes, are the product of vegetables; the moft dangerous confequences, to the human or animal frame, may be derived from many plants, whilft the beft and moft fuccefsful remedies are derived from others.

Among thofe plants, which are or may be injurious, we may rank the Fraxinella; but fuch are the confequences of its ill influence, that it may be avoided with lefs caution than many others

" The Fraxinella in the ftill evenings of dry feafons, emits
" a inflamable air of gas, and flafhes at the approach of a
" candle. There are inftances of human creatures who have taken

"taken fire ſpontaneouſly, and been totally conſumed." *Phil. Tranſ.*

The ſtem and its branches are covered with glands, or ſmall protuberances; the filaments of the ſtamens have many on them alſo;* and though the leaves have no protuberances on them, they have many very viſible punctures throughout their ſurface.—Upon the whole, we cannot poſſibly but conſider that thoſe are tranſpiring veſſels; agreeable to which we may ſuppoſe the tranſpired particles (as they have a very powerful ſmell) conſtitutes a part of, or is, the matter ſo dangerous in its effect.

* Explanation of Plate 12 of The Minutiæ of Vegetables, will more particularly illuſtrate the ſtructure, &c. of thoſe protuberances, or glands.

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Executed & Pub.d as the Act directs by E. Donovan Nov. 1, 1790.

TRADESCANTIA VIRGINICA, VIRGINIAN SPIDER-WORT.

Clafs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Calyx triphyllus, *Petala* 3, Filamenta villis articulatis. *Capfula* 3 locularis.

Specific Character.

TRADESCANTIA *Virginica* erecta lævis, floribus congeftis. *Linn. Syft. Veget. Edit.* 14, *p.* 314.

The foon-fading Spiderwort of Virginia, or Tradefcant his Spiderwort. Park. Parad. 152, 5. t. 151. f. 4.

Parkinfon informs us, that for this ornament to the flower-garden, we are indebted to John Tradefcant, who firft received it of a friend that brought it from Virginia.

It bears the extremity of heat and cold uninjured, continuing in flower throughout the fummer, till the latter end of the year; which, together with its being perennial, and requiring no other attention to propagate it, than parting its roots in autumn—or fowing feeds for its varieties (the pale purple, and white-flowered) renders it more generally cultivated than many other plants.

Antient Botanifts by, the name of Spider-wort diftinguifhed feveral plants of very different genera, fuppofing them to be an antidote, for the bite of a particular fpi-

der, then called Phalangium, but ſince altered; the Phalangium of Linneus being well known to be harmleſs.

Each flower laſts but a day, but the number of buds which are ready to open as the preceding flower droops, ſcarcely ever ſuffer it, through the whole ſummer, to appear without bloſſoms—and from this circumſtance, Tournefort called it *Ephemerum*, but Linneus altered it to *Tradeſcantia*.

One particular which relates to its generic character, is *filamenta villis articulatis*, expreſſive of the hairs on the filament being compoſed of joints, but as the microſcope, or microſcopical figures only can repreſent this ſmall and ſingular object, we beg leave to refer our readers to the *Minutiæ* of *Vegetables*.

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Executed & Published by E. A. Donovan as the Act directs Nov. 1. 1793

VINCA ROSEA flore carneo, MADAGASCAR RED PERIWINKLE.

Clafs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Contorta. *Folliculi* 2, erecti. *Semina* nuda.

Specific Character.

VINCA *Rofea.* Caule frutefcente erecto floribus geminis feffilibus, foliis ovato-oblongis, petiolis bafi bidentatis. *Syft. Veget.* 252.

A native of the Eaft Indies, was cultivated in 1757, by Mr. P. Miller, and bears bloffoms through the greateft part of the fummer.

There is a variety of this fpecies with white bloffoms, (flore alba umbone carneo) which, with the red-flowered, makes a pleafing diverfity in the ftove, among other fcarce exotics.

Few plants maintain a greater fucceffion of flowers, during the fummer, for, like the Tradefcantia, it always has a profu fion in ftore, and as one falls or dies away, another fucceeds it —when it blows the flowers are not fo large as towards the middle of the courfe of its flowering, and after they have attained a proper fize, they again dwindle till they are not above half the fize they were in the more vigorous ftate of flowering.

In

It is propagated by cuttings or by ſeeds, raiſed and cultivated in a ſtove, few plants more readily increaſing, but notwithſtanding of a tender conſtitution and unable to bear the ſeverity of climate.